

### 3.6 – Green Power Markets

There are three distinct markets for green power in the United States. In regulated markets, a single utility may provide a green power option to its customers through “green pricing,” which is an optional service or tariff offered to customers. These utilities include investor-owned utilities, rural electric cooperatives, and other publicly owned utilities. More than 500 utilities in 34 states offer green pricing or are in the process of preparing programs.

In restructured (or competitive) electricity markets, retail electricity customers can choose from among multiple electricity suppliers, some of which may offer green power. Electricity markets are now open to full competition in a number of states, while others are phasing in competition.

Finally, consumers can purchase green power through “renewable energy certificates.” These certificates represent the environmental attributes of renewable energy generation and can be sold to customers in either type of market, whether or not they already have access to a green power product from their existing retail power provider.

Utility market research shows that majorities of customer respondents are likely to state that they would pay at least \$5 more per month for renewable energy. And business and other nonresidential customers, including colleges and universities, and government entities are increasingly interested in green power.

**Table 3.6.1. New Renewable Capacity Supplying Green Power Markets as of December 2003 (in MW)**

Source	MW in Place	%	MW Planned	%
Wind	1544.6	93.8	306.7	78.0
Biomass	77.4	4.7	60.3	15.3
Solar	5.6	0.3	1.3	0.3
Geothermal	10.5	0.6	25.0	6.4
Small Hydro	9.3	0.6	0.0	0.0
Total	1647.3	100.0	393.4	100.0
<b>Source:</b> L.Bird and B. Swezey, Estimates of Renewable Energy Capacity Serving U.S. Green Power Markets, National Renewable Energy Laboratory, June 2004. <a href="http://www.eere.energy.gov/greenpower/resources/tables/new_gp_cap.shtml">http://www.eere.energy.gov/greenpower/resources/tables/new_gp_cap.shtml</a>				

**Table 3.6.2: Estimated Green Power Customers and Sales by Market Segment (2003)**

<b>Segment</b>	<b>Customers</b>	<b>Sales (Billions of kWh)*</b>
Utility Green Pricing	265,000	1.3
Competitive Markets	150,000	1.9
REC Markets	5,000	0.7
Retail Total	420,000	3.9
<p>*Includes sales of new and existing renewable energy. <b>Source:</b> Bird, L. and B. Swezey, 2004. <i>Green Power Marketing in the United States: A Status Report (Seventh Edition)</i>, NREL/TP-620-36823. Golden, CO: National Renewable Energy Laboratory, September. <a href="http://www.eere.energy.gov/greenpower/pdfs/36823.pdf">http://www.eere.energy.gov/greenpower/pdfs/36823.pdf</a></p>		